



US009636195B2

(12) **United States Patent**
Wolpo

(10) **Patent No.:** **US 9,636,195 B2**
(45) **Date of Patent:** **May 2, 2017**

(54) **HANDS FREE ORAL HYGIENE SYSTEM**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

International Search Report and Written Opinion of the International Searching Authority Application No. PCT/US2013/062219
Completed: Feb. 10, 2014; Mailing Date: Feb. 24, 2014 10 pages.

(21) Appl. No.: **14/038,186**

(22) Filed: **Sep. 26, 2013**

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(65) **Prior Publication Data**

US 2014/0093836 A1 Apr. 3, 2014

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Related U.S. Application Data

(60) Provisional application No. 61/707,550, filed on Sep. 28, 2012.

(57) **ABSTRACT**

(51) **Int. Cl.**

A61C 3/00 (2006.01)

A61C 17/22 (2006.01)

(Continued)

An oral hygiene system for cleaning teeth and gums includes a mouthpiece having at least one arcuate channel adapted to receive and surround the teeth. The mouthpiece includes at least two modalities chosen from a mechanical modality, an iontophoretic modality, and a disinfection modality. The mechanical modality brushes the teeth and gums and dislodges food debris, the iontophoretic modality breaks up plaque and tartar buildup, and the disinfection modality removes the food debris, plaque and tartar buildup. A control system coordinates the transmission of modalities, tracks and records utilization, recording completed and failed treatment cycles, and transmits them to a monitoring system. The monitoring system, which links to electronic medical administering record (eMAR) technology and patient tracking technology (e.g., RFID sensors, electronic tags), facilitates compliance with recommended oral hygiene regimens and review of compliance by medical staff, assisted living staff, and/or caregivers.

(52) **U.S. Cl.**

CPC **A61C 17/228** (2013.01); **A46B 15/0024** (2013.01); **A61C 3/005** (2013.01);
(Continued)

(58) **Field of Classification Search**

CPC . A61C 17/228; A61C 17/0211; A61C 17/349;
A61C 17/222; A61C 17/3481;
(Continued)

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19 Claims, 4 Drawing Sheets

